

Applicants : B. Jack Longley  
Serial No. : 09/474,478  
Filed : December 29, 1999  
Page 2

In the title:

Please <sup>✓</sup>delete the title of the invention and add the following new title:

--Methods of Use of Compounds Which Inhibit The Stem Cell Signaling Pathway--

In the claims

Please amend claims 12-19, 23-26, 28-31 and 33 under the provisions of 37 C.F.R. § 1.121(c) as follows. A marked up version of the amended claims wherein the deleted material is in brackets and the inserted material is underlined is attached hereto as Exhibit A. Please also add new claims 39-49 as follows.

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- 12. (2X amended) The method of any one of claims 1-9, which comprises inhibiting the kinase enzymatic reaction of kit protein.--
- 13. (2X amended) The method of any one of claims 1-9, which comprises inhibiting chymase, elastase or other SCF cleaving enzymes.--
- 14. (2X amended) The method of any one of claims 1-9, which comprises inhibiting ligand binding with an antibody, peptide, or nonpeptide chemical.--
- 15. (2X amended) The method of any one of claims 1-9, which comprises inhibiting kit dimerization with an antibody, peptide, or nonpeptide chemical.--

Applicants : B. Jack Longley  
Serial No. : 09/474,478  
Filed : December 29, 1999  
Page 3

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- 16. (2X amended) The method of any one of claims 1-9, wherein downstream signaling of the kit activation pathway is inhibited by blocking substrate association with kit kinase domain.--
- 17. (2X amended) The method of any one of claims 1-9, wherein downstream signaling of the kit activation pathway is inhibited by blocking enzymatic function in the downstream signaling pathway.--
- 18. (2X amended) The method of any one of claims 1-9, wherein downstream signaling of the kit activation pathway is inhibited by blocking binding of molecules in the downstream signaling pathway.--
- 19. (2X amended) The method of any one of claims 1-9, wherein the compound is an antibody or portion thereof.--
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- 23. (2X amended) The method of claim 22, wherein the antibody is ACK2.--
- 24. (2X amended) The method of any one of claims 1-9, wherein the compound comprises a Fab fragment of an anti-kit antibody.--
- B<sup>2</sup>  
--25. (2X amended) The method of any one of claims 1-9, wherein the compound comprises the variable domain of an anti-kit antibody.--
- 26. (2X amended) The method of any one of claims 1-9, wherein

Applicants : B. Jack Longley  
Serial No. : 09/474,478  
Filed : December 29, 1999  
Page 4

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the compound comprises one or more CDR portions of an anti-kit antibody.--

--28. (2X amended) The method of any one of claims 1-9, wherein the compound comprises a peptide, peptidomimetic, a nucleic acid, or an organic compound with a molecular weight less than 500 Daltons.--

B<sup>3</sup>  
--29. (2X amended) The method of any one of claims 1-9, wherein the compound is sSCF, sKIT ligand or a fragment thereof.-

--30. (2X amended) The method of any one of claims 1-9, wherein the compound is sKIT or a fragment thereof.--

--31. (2X amended) The method of any one of claims 1-9, wherein the subject is a mammal.--

B<sup>4</sup>  
--33. (2X amended) The method of any one of claims 1-9, wherein the administration is intralesional, intraperitoneal, intramuscular, subcutaneous, intravenous, liposome mediated delivery, transmucosal, intestinal, topical, nasal, oral, anal, ocular or otic delivery.

B<sup>5</sup>  
--39. (New) The method of claim 9, wherein the tumor is a gastrointestinal stromal tumor.--

--40. (New) The method of claim 9, wherein the tumor is a germ cell tumor.--

Applicants: B. Jack Longley  
Serial No.: Not Yet Known  
Filed : December 29, 1999  
Page 5

- 41. (New) The method of claim 19, wherein the antibody is a monoclonal antibody.--
- 42. (New) The method of claim 41, wherein the monoclonal antibody is a human, humanized or a chimeric antibody
- 43. (New) The method of claim 41, wherein the monoclonal antibody is an anti-kit antibody.
- 44. (New) The method of claim 19, wherein the antibody is selected from the group consisting of IgA, IgD, IgE, IgG and IgM.--
- 45. (New) The method of claim 31, wherein the mammal is a human being, dog or cat.--
- 46. (New) The method of claim 34, wherein the subject is a male subject.--
- 47. (New) The method of claim 34, wherein the subject is a female subject.--
- 48. (New) The method of claim 34, which comprises inhibiting the kinase enzymatic reaction of kit protein.--
- 49. (New) The method of claim 34, which comprises inhibiting chymase, elastase or other SCF cleaving enzymes.--
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